

Listing of Claims

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

Claims 1-9 (Canceled)

10. (Currently Amended) A method for treating off gas from a carbothermic aluminum producing reaction comprising:

- (a) introducing particulate carbon in an upper part of a column;
- (b) forming a height adjustable bed of said particulate carbon in said column;
- (c) introducing off gas into a lower part of said column such that said off gas flows up through said bed of particulate carbon;
- (d) discharging particulate carbon material through a lower part of said column; and
- (e) adjusting the height of said bed of particulate carbon to maintain an approximately constant retention time of said off gas in said particulate carbon independent of the amount of pressure of the off gas supplied.

11. (Original) The method of claim 10 further comprising increasing the height of said bed of particulate carbon by introducing more particulate carbon into said column.

12. (Original) The method of claim 10 further comprising decreasing the height of said bed of particulate carbon by discharging particulate carbon from said column.

13. (Original) The method of claim 10 wherein said off gas is introduced tangentially into the lower part of said column.

14. (Previously Presented) The method of claim 10, wherein said adjusting step comprises:

moving a supply pipe interconnected to said column.

15. (Previously Presented) The method of claim 14, wherein said moving step comprises:

vertically adjusting the height of said supply pipe relative to said column.

16. (Previously Presented) The method of claim 10, wherein said introducing off gas step comprises:

introducing said off gas from a furnace roof of an aluminum smelting reactor.

17. (Previously Presented) The method of claim 16, wherein said column is located above said furnace roof.

18. (Previously Presented) The method of claim 16, wherein said discharging step comprises:

discharging said particulate carbon matter directly from said lower part of said column into said aluminum smelting reactor.